



6 Multi-Modal Analysis

Linking the bikeway facility system with other transportation modes can enhance the efficiency of bicycle transportation, especially for commuting. Cyclists can use their bicycles to get to or from a multi-modal transfer point as part of their regular commute. Where transit modes allow bicycles on board, multi-modal transit becomes a very useful transportation option. Whether the other modes allow bicycles to be brought on board or not, they

allow for much greater flexibility for persons choosing to commute by modes other than the private automobile.

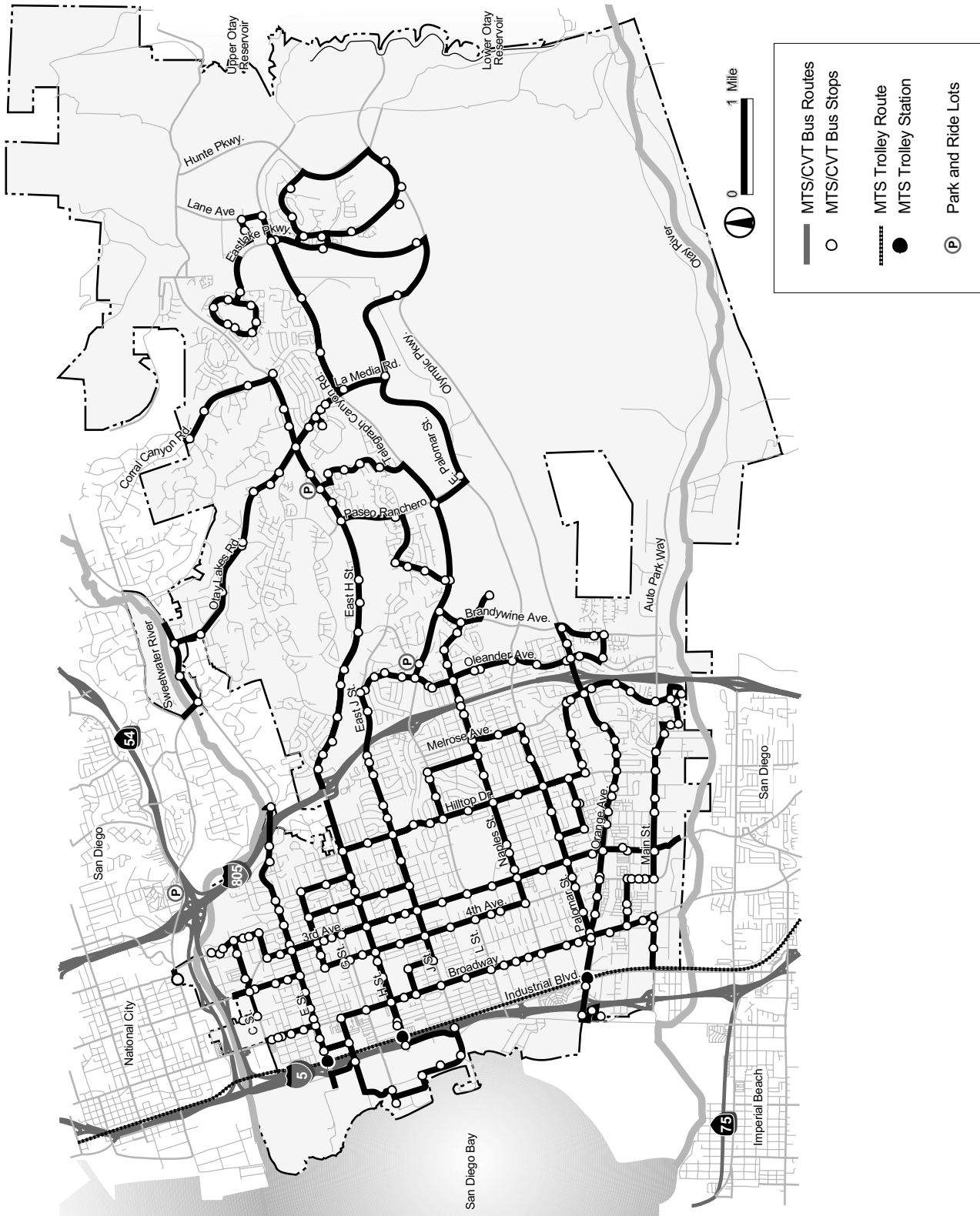
In the case of Chula Vista, all buses have bicycle racks except those on three short local loop routes. All other bus routes employ outside bicycle racks and the San Diego Trolley provides interior space for bicycles.



Transit System

Chula Vista Bikeway Master Plan Update - 2005

**Figure
6-1**



Refer to CVT Bus Route maps for more information.

6.1 Chula Vista Transit (CVT)

The Chula Vista Transit System (CVT) is part of the greater San Diego regional Metropolitan Transit System (MTS). MTS coordinates fares, transfers, routes and information services for the region. Being part of MTS enables CVT passengers to transfer from one transit system to another in a seamless fashion. CVT interfaces with the San Diego Trolley's Blue Line at the Bayfront/E Street, H Street, and Palomar Street Stations. CVT also provides connections to MTDB's regional bus route 932 that connects downtown San Diego and San Ysidro. (See Figure 6-1: Transit System.)



Bicycle rack-equipped Chula Vista Transit bus

CVT operates 12 routes within Chula Vista, with the following destinations:

Route 701 - Serves the H Street Trolley Station and the Palomar Street Trolley Station via F Street, Hilltop Drive and Main Street

Route 702 - Serves the H Street Trolley Station and the Palomar Street Trolley Station via 4th Avenue, 2nd Street, Melrose Avenue and Palomar Street

Route 703 serves the H Street Trolley Station and the Palomar Street Trolley Station via

3rd Avenue, J Street, Crest Street, Oleander Avenue and Orange Avenue

Route 704 - Serves the H Street Trolley Station and Southwestern College via H Street, 4th Avenue, Naples Avenue and Telegraph Canyon Road. This route provides express service between Southwestern College and H Street Trolley Station on a limited basis.

Route 705 - Serves the Bayfront/E Street Trolley Station and Southwestern College via E Street, Bonita Road, and Otay Lakes Road

Route 706 - "Downtowner", is a loop route serving the H Street Trolley Station and business district via 4th Avenue and 3rd Avenue

Route 706A - "Downtowner" is a loop route serving the Bayfront/E Street Trolley Station, the Chula Vista Marina, KOA Campground and the business district

Route 707 - Serves the H Street Trolley Station and Sharp Chula Vista Medical Center via East H Street, Paseo Del Rey and Telegraph Canyon Road

Route 708 - Serves the Bayfront/E Street Trolley Station and the Chula Vista Nature Interpretive Center

Route 709 - Serves the H Street Trolley Station, Southwestern College and EastLake via H Street, Otay Lakes Road and EastLake Parkway. This Route also provides express service between Southwestern College and H Street Trolley Station on a limited basis.

Route 711 - Serves Plaza Bonita Shopping Center, Southwestern College and EastLake via Bonita Mesa Road, Bonita Road, Central Avenue, Corral Canyon Road, East H Street and Otay Lakes Road

Route 712 - Serves the Palomar Street Trolley Station and Sharp Chula Vista Medical

Center via Palomar Street, Melrose Avenue and Naples Street

In general, CVT bus routes run on major thoroughfares that closely correspond with existing bicycle facilities, allowing cyclists to board at a preferred bus stop and putting their bicycle on the bus rack. Most CVT buses are equipped with two-bike racks which serves multi-modal travel at the most fundamental level. However, some buses on Routes 706 and 706A lack racks and Route 708 buses have none. The CVT routes do appear to serve the areas of highest employment density, which are generally situated along the major arterials.

6.2 Metropolitan Transit System (MTS) Trolley

Consultant staff reviewed the location of existing transfer points such as trolley stations and bus stops in relation to bikeway facilities to determine how well the systems serve the purposes of multi-modal travel.

MTS operates two trolley routes within the greater San Diego region, of which the “Blue Route” serves Chula Vista and the South Bay. There are three MTS trolley stations in Chula Vista, but all are within the coastal strip in

the westernmost portion of the City. Besides the coastal strip served by the trolley, buses provide mass transit services throughout the remainder of the City. (See Figure 6-1: Transit System.)

The trolley system no longer requires permits to bring a bicycle on board, but limits the number of bicycles per trolley car to two, and only one during rush hours (6:00 AM to 9:00 AM and 3:00 PM to 6:00 PM). With two or three cars per train, cyclists can usually find space. Otherwise, they are required to wait for the next train. An average of 71 cyclists a day bring bicycles onto the trolley.

Chula Vista’s 1996 *Bikeway Master Plan* stated: “Consideration should be given to placing additional lockers at the trolley stations and at some new locations. Large commercial facilities, schools and other central locations could be good places for new lockers.” The provision of secure bicycle parking is an important element in making the connection between commuter cycling and transit use. Bike lockers are the most secure way for cyclists to store their bicycles when they need to leave them unattended when switching to another travel mode such as the trolley or car-pooling since the bicycles are fully enclosed and inaccessible to would-be thieves.



Bayfront/E Street Trolley Station

Lockers have been installed at all three of Chula Vista’s trolley stations under a program administered by SANDAG. Bicycle locker use is free with a \$25 key deposit. There is a waiting list for lockers at Palomar Street Station, but a small number of lockers are currently available at the Bayfront/E Street and H Street Stations.

SANDAG has experienced problems with lockers at its South Bay stations including lockers being used for general storage instead of for bicycles, and bicycles being stored for long periods without being used. Planned

new locker installations are likely to employ units with mesh sides to allow for periodic inspection.

Throughout coastal San Diego County, maintenance of painted finishes has been difficult and steel lockers routinely corrode. An option that has been successfully tested is installing units of corrosion-free composite construction.



Bicycle lockers at Bayfront/E Street Trolley Station

The user pays a \$35 deposit for an electronic key, puts the bicycle into an eLocker, shuts the door, and it will only open using that user's key. When the user returns, removes the bicycle and closes the eLocker, it is then available to any eLocker participant.

These on-demand Lockers allow commuters the flexibility to use their bicycles for some



More lockers may be needed to meet demand

Not only do they not rust, some units employ materials that allow relatively easy removal of graffiti. SANDAG staff asked that any additions recommended in this bikeway master plan update be discussed with their bicycle locker program administrator to define the type of unit to be specified.

In an effort to expand bicycle lockers use, SANDAG has installed 36 "eLockers" at three North County Coaster stations in a six-month pilot program to evaluate new electronic, on-demand bicycle lockers. Instead of traditional lock and key mechanisms, eLockers use an electronic key with a touch-sensitive imbedded computer chip. Unlike conventional lockers assigned to a single user, eLockers are available any time they are not in use to anyone participating in the eLocker program.

of their commute trips on a daily, first-come, first-served basis. When not in use, the on-demand lockers are available to other program participants because cyclists have the flexibility of using a bike locker when they need it, without tying up a locker when they do not.

6.3 Bus Rapid Transit (BRT)

Additional regional planning is underway for a bus rapid transit (BRT) system to serve the South Bay area. Since the consultant is providing GIS services for this effort, it can and will be closely monitored during the course of this bikeway master plan update. At this time, it is unknown whether bicycles will be accommodated on BRT vehicles. If not, it is likely bicycle lockers will be needed at some BRT stops, particularly if the stop is

also a transit center serving multiple transit modes such as regular buses and trolleys. Depending on eventual route and stop selection, BRT stops could also be located at new or proposed park-and-ride lots equipped with bicycle lockers.

6.4 Existing Park and Ride Facilities

There are two park and ride lots in Chula Vista, and though not within Chula Vista's city limits, there are also two other park and ride lots immediately north of the City. (See Figure 6-1: Transit System and Transfer Points.) Note that only one is equipped with bicycle lockers.

Park and Ride Lot 9: This lot is located just north of Chula Vista along Sweetwater Road, northeast of the intersection of I-805 and SR-54. According to SANDAG, nearby services include bus service, bicycle lockers and an on-site attendant.

Park and Ride Lot 50: This lot is located in east-central Chula Vista at the corner of Paseo del Rey and Telegraph Canyon Road at the Chula Vista Alliance Church. According to SANDAG, nearby services include bus service and child care

Park and Ride Lot 56: This lot is located in south-central Chula Vista at the northeast corner of Buena Vista Way and East H Street at the Joy Lutheran Church. According to SANDAG, nearby services include bus service.

6.5 Existing Transit Centers

Chula Vista's three trolley stations, Palomar Street, Bayfront/E Street and H Street, are not designated as transit centers, but they are all served by at least three local (CVT) bus routes. The H Street Station is a stop on seven CVT routes, for example.

6.6 Multi-Modal Summary

Though light rail trolley service is confined to the far western coastal portion of Chula Vista, the MTS Blue Line does stop at three stations equipped with bike lockers. Cyclists are allowed to bring bicycles on the trolley cars themselves, albeit on a limited basis.

The remainder of the City is served by bus routes on virtually all major thoroughfares and extending well out into the eastern portion of the City. The location of bus routes appears to correlate with population density because there are considerably more routes west of I-805 than east of it. However, route location probably also correlates with the location of available arterial roadways, which are fewer and farther apart in the eastern part of the City than in the older portion west of I-805 with its traditional grid street system.

All but one of the twelve bus routes link with at least one of the three trolley stations and most buses have bike racks. Route 706 and 706A buses do not all have racks, but the routes serve relatively short downtown business district loops where, presumably, bicycle use is not in demand. Finally, Route 708 is a very short loop serving the Chula Vista Nature Center where bicycle and pedestrian access is prohibited.

